

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



2 TK4018
U5
Copy

5

UNITED STATES DEPARTMENT OF AGRICULTURE
Rural Electrification Administration

PREFACE

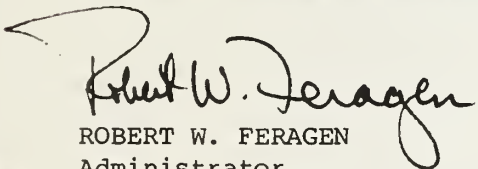
Many rural electric and telephone systems will undergo a change in management personnel in the coming years as retirement and other factors are expected to remove a number of key employees. REA believes that the future personnel needs created by these changes are too important to be left to chance, such as having qualified people ready to fill key positions as necessary, if the systems are to survive.

The cooperative education program offers one means for the borrower's system to obtain young people qualified to meet the changing employment needs and requirements. It is a carefully developed plan which allows students to gain meaningful and practical work experiences which are directly related to their college academic major. This program is designed to integrate classroom study with employment. It is based upon achievement in the college classroom but is equally dependent upon practical experience in the world of work.

Cooperative education programs can be tailored to suit a borrower's specific needs. Some REA-financed systems want the students on a full-time permanent basis. There may be some community colleges which can provide REA-financed systems with students who live in the local communities and can work during the day on a full-time basis and attend school during the evening.

REA encourages borrowers to carefully survey local high schools to determine potential candidates for future employment. These students should be selected while they are in their junior and senior years. If necessary, the systems should be prepared to track such students through college, using the cooperative education program, and back to their systems for full-time employment.

I heartily endorse our continued efforts to promote cooperative education. It's an appropriate method for strengthening REA-financed systems. I also endorse this program as a means of supplying our rural communities with the outstanding human resources needed during the next decade of rural development.


ROBERT W. FERAGEN
Administrator

U.S.D.A.
NATL AGRIC LIBRARY
JUN 13 '60
COMM. & ECON. RECS.

TABLE OF CONTENTS

	Page
PREFACE.....	I
I. A COOPERATIVE EDUCATION PROGRAM.....	1
Purpose.....	1
The Program.....	1
The Employer and Benefits Derived.....	2
The Student.....	3
The Educational Institution.....	4
II. THE COLLEGE WORK-STUDY PROGRAM.....	4
III. WORK EXPERIENCE AREAS OF REA-FINANCED SYSTEMS.....	5
Management.....	5
Accounting.....	5
Engineering.....	5
IV. HOW TO START A COOPERATIVE EDUCATION PROGRAM.....	5
V. THE ROLE OF THE STATEWIDE ASSOCIATIONS IN PLANNING AND PROMOTING COOPERATIVE EDUCATION.....	7
VI. PROCEDURES FOR INITIATING THE COLLEGE WORK-STUDY PROGRAM.....	8
VII. THE AGREEMENT WITH THE STUDENT.....	9
VIII. THE REMUNERATION.....	9
IX. TERMINATING WORK ASSIGNMENTS.....	9
X. EVALUATION REPORT OF THE STUDENT.....	9
APPENDICES	
A - Suggested Poster.....	10
B - Examples of Duties and Responsibilities Under Major Work Experience Areas.....	11
C - The Cooperative Education Program Can Be Tailored To Fit Your Needs.....	13
D - The Electrification Industry.....	14
E - A Telephone Company Career.....	20

UNITED STATES DEPARTMENT OF AGRICULTURE
Rural Electrification Administration

I. A COOPERATIVE EDUCATION PROGRAM

Purpose

The cooperative education program is designed to provide for the total development of all human resources within an REA-financed system's service area. The leaders that will be needed for rural electric and rural telephone systems in the years ahead must be identified now. Training programs to stimulate interests of these potential leaders in rural America must be established and developed today.

The specific purposes are to:

1. Provide future leadership for REA-financed electric and telephone systems.
2. Provide leadership for rural community development, including water systems, industrial parks and any other worthwhile community effort.
3. Help students become more closely aware of the significance of a career in rural utility operation.

The Program

Cooperative education is a voluntary educational and professional development program designed to enable students to combine their academic program at an educational institution with supervised and progressive off-campus work experience. REA-financed electric and telephone systems are encouraged to participate as off-campus employers.

Under the program students alternate study and work periods (including summers on an optional basis) during their term at the educational institution. The off-campus work experience with the REA-financed systems should be related to the students' career goals as much as possible. Such a program enables a student to prepare more realistically for a selected professional career in the utility system. It also provides for the development of competencies that students otherwise would not have an opportunity to experience.

The employer should provide the student with a meaningful and progressive work experience. The employer has the opportunity of helping the student to assess career goals and to reevaluate the academic preparation needed to achieve his or her ambition and interests. The work assigned to the student should be consistent with the student's capabilities and should be stimulating with increasing responsibilities in subsequent work periods.

This supervisor assigned to the student should be someone who was included in the initial planning of the program, who understands the program's objectives, and who is committed to the program's success. During an orientation period which should be provided, the student should be advised about the REA-financed system's policies, his work assignments, and the scope of counseling and personal guidance services he will receive. The student should be informed of the system's expectations during his work experience. The supervisor should regularly evaluate the student's quality of work and encourage continued professional performance.

The student should be given help, particularly in the development and improvement of: (1) human relations, (2) personal appearance, (3) quality of work, and (4) dependability. The student should be made aware of the importance of decision-making ability and should be given opportunity and experience in developing this ability. Inappropriate behavior should be promptly called to the attention of the student.

The Employer and Benefits Derived

The cooperative education program is not only concerned with the development of a human resources pool for the REA-financed organization, but also with the development of human resources in the many facets of community life. These human resources may range from school teachers in local school systems, to presidents of the local banks, to governors of states, to members of Congress, or even to the President of the United States.

A cooperative education program can enable an REA-financed system to:

1. Obtain young workers with a built-in loyalty and respect for the program which may be exemplified in many ways in the years ahead - all of this without having to provide permanent employment to these young people.
2. Select prospective young employees through observation while they are at work in the system before considering and offering them permanent employment opportunities.
3. Train promising future employees at a lower recruiting and training cost.
4. Utilize students on a year-round basis to the extent that other professional staff members may be relieved to assume other duties and responsibilities for which they previously had no time.

5. Bring about a closer working relationship between the employer and the university. This interlocking of "experience and education" will enable the students to gain a better understanding of the real world of work and may better prepare them to find their place there.

The Student

As previously indicated, the cooperative education program is a voluntary program. REA-financed systems that wish to take part in this program should do their own recruiting, preferably from the high schools in their own service areas.* Each student who is recruited, however, should be a senior above the average scholastically, planning to attend an institution of higher education, and be recommended by both the faculty advisor and the principal.

The REA-financed system should provide some work experiences for the student, if possible, prior to his or her enrollment in a college or university. Care should be taken to assure that the work is as closely related to the student's anticipated college or university major as possible.

If the college or university which the student plans to attend has a cooperative education program, the manager of the REA-financed system should write to the director of the cooperative education program at that institution, advising the director of the system's interest in the student and requesting that the student be enrolled in the cooperative education program and thereby continue his or her work experience in the REA-financed system.

The student should personally seek out the director of the cooperative education program at the institution where he or she is in attendance or plans to attend. The student should describe the type of work experience just completed at the REA-financed system (if any) and the potential of the program in developing additional opportunities in his or her major field.

The director of the cooperative education program and the manager of the REA-financed system should then coordinate their efforts to guide the student through the cooperative education program at the college or university.

Participation in the cooperative education program with an REA-financed system should provide the student with an opportunity to:

1. Make a better choice of career goals.
2. Develop self-confidence.
3. Grow in maturity, professional motivation, and development.

*See Appendix A for a suggested poster which can be displayed at high schools or used as "handouts" while recruiting for the work opportunity program.

4. Better understand the relationship that exists between studies in the college classroom and performance on the job.

5. Become a better participant and/or leader in the community where he or she resides.

The student is responsible for housing arrangements during the co-op work period. A housing report is, therefore, sent to the director of the cooperative education program unless the student is living at home with his or her parents.

The Educational Institutions

There are a large number of educational institutions throughout the country which have been actively involved in the cooperative education program since its inception in 1906. Community or junior colleges located in an REA-financed system's service area may already have a cooperative education program that will suit the system's needs. Many of these local educational institutions have expressed a willingness to work with REA-financed systems. Why not contact them?*

II. THE COLLEGE WORK-STUDY PROGRAM

The College Work-Study Program is a program of grants to eligible and participating educational institutions (such as colleges and universities, business colleges, and area vocational schools) to enable them to provide expanded part-time employment opportunities for eligible students. Such employment may include work at the institution itself or work in the public interest arranged by the institution with an off-campus public or private nonprofit organization. Part-time employment under the program may include work of up to 40 hours a week.

Only eligible students may participate in the college work-study program. The determination of student eligibility is made by the institution in which the student is enrolled or accepted for enrollment. Only a student who is in need of the earnings from part-time employment in order to carry on a program of at least half-time study at the institution is eligible for employment under the program. Preference for employment under the program is given to graduate and undergraduate students with greatest financial need.

*Where cooperative education arrangements cannot be worked out between the REA-financed system and the educational institutions in the local areas or state, the system is encouraged to independently recruit and enter into training and/or employment agreements with suitable students outside the cooperative education program.

III. WORK EXPERIENCE AREAS OF REA-FINANCED SYSTEMS

With the possible exception of activities associated with the generation of power, the management and operation of a rural electric distribution system or rural telephone system are the same as any large urban utility. Since they are generally smaller, rural electric or telephone systems are able to provide the student with greater opportunity to gain experience in all facets of utility management and operation.

Following are some of the areas of borrower operations where a work-experience program could be developed. It should be noted that several of the activities listed under "Management" are appropriate for students engaged in liberal arts studies, e.g., Member and Public Relations and Community Development (see Appendix B).

Management

Operating Budgets	Purchasing
Financial Forecasts	Labor Relations
Organizational Chart	*Consumer and Public Relations
Policy Statements	*Community Development
Staff Instructions	--Surveys
Operating Procedures	--Promotion
Inventory Control	--Financing
Personnel Training	

Accounting

Billing	Cost Accounting
Bookkeeping	Financial Statements
Payroll	Cashiering
Property Records	Construction Budgets
Work Orders	

Engineering

Staking	Voltage Drop Studies	Annual Work Plans
Construction	Long-Range Planning	Warehousing
Pole Numbering	Meter & Transformer	
Mapping	Performance Records	
Rate Studies	Work Orders	

IV. HOW TO START A COOPERATIVE EDUCATION PROGRAM

To get a meaningful program underway at an REA-financed system, the following procedures should be implemented:

*The type of work involved in these experience areas is described in Appendix B. (This Appendix provides examples of how a system may reflect specific functions under a major work experience area.)

1. The board of directors should pass a resolution authorizing the manager to proceed with whatever measures are necessary to establish the program at the organization.

2. The manager should:

- a. Contact the educational institution nearest to the organization's service area which has a cooperative education program in operation and establish a working relationship with the director of the program.
- b. Provide the director of the co-op program at the educational institution with a copy of REA's cooperative education manual and discuss with him the work experience which the organization can provide for the student or students.
- c. Select the area of discipline or major area of concentration from which the organization desires to receive students. If the organization has already selected a student from the local service area and the student is presently enrolled at this institution, this information should be given to the director so that the director may better coordinate the curriculum activities and work experiences of the student.
- d. Invite the co-op program director to the headquarters of the REA-financed system to review facilities and the program the organization has in operation or has planned. This will give the director a better understanding of the system's program and the work experience that has been planned for the students.
- e. Establish a work-study time schedule for the students. The program may be for summers only. If so, this should be discussed and agreed upon. Whatever the arrangements are, they should be clearly understood by all parties concerned.
- f. Discuss with the co-op program director the kind of agreement, contract, or understanding the system has or wishes to make with the students, the rate of pay and the fringe benefits if there are any, decorum and what the system expects from the students and what the students can expect from the system, and the supervisory provisions for the students.
- g. Determine the cost of the program on an annual basis and present this to the board of directors in order to have the program included in the budget.

V. THE ROLE OF THE STATEWIDE ASSOCIATIONS IN PLANNING
AND PROMOTING COOPERATIVE EDUCATION

Statewide associations can and should:

1. Develop a cooperative education program for member systems as described in this manual.
2. Encourage local systems to become involved.
3. Discuss the program at meetings and conventions.
4. Assist their members to carry out activities which would be difficult for individual members to carry out.
5. Sell the program by:
 - a. Working cooperatively with the educational institutions and off-campus employers to develop favorable conditions for training and employment (tuition, salary, etc.).
 - b. Developing additional types of work experience for the cooperative education students.
6. Develop audio-visual presentations on "careers" to be used for other recruiting efforts.
7. Become involved in coordinating efforts such as:
 - a. Collecting employing agency agreements.
 - b. Communicating with participating members to obtain assessments of personnel needs and job descriptions of positions students can fill.
 - c. Scheduling orientation sessions with colleges and universities to enable them to better understand:
 - (1) The cooperative education program.
 - (2) Responsibility of the educational institutions with respect to the program.
 - (3) Responsibility of the REA-financed systems with respect to the program.
 - (4) Students' expectations and responsibilities.
 - d. Compiling a list of positions which could possibly be filled at REA-financed systems, and sending such a list to

educational institutions. Many REA-financed systems can use students with college majors in the following areas:

- (1) Home Economics
- (2) Business Education
- (3) Business Administration
- (4) Accounting
- (5) Engineering
- (6) Secretarial Science
- (7) Agricultural Education
- (8) Industrial Education

VI. PROCEDURES FOR INITIATING THE COLLEGE WORK STUDY PROGRAM*

A public or private nonprofit organization which desires to obtain the services of eligible students under the college work-study program should contact the various participating colleges, universities, business colleges, and other post-secondary educational institutions in its service area. The program is administered by the educational institution's student financial aid office. At present, approximately 3,000 educational institutions participate in the program, and many of these institutions operate off-campus programs which can easily be expanded to include additional off-campus agencies. Educational institutions which are not participating in the program at present may be planning to start such programs in the future.

Both educational institutions and off-campus employers have much to gain from cooperative education and work experience programs which are supported by the college work-study program. Participation in the cooperative education program with or without support from the college work-study program, however, will make certain new demands upon the REA-financed electric or telephone system.

*It must be emphasized that the College Work-Study Program (CWSP) is limited and is not available to all students. The program is available only to those students who have shown a need for financial assistance and have shown proof of this need to the financial aid officer at the college or university.

VII. THE AGREEMENT WITH THE STUDENT

Employment is one of the most important aspects of student self-help. The Rural Electrification Administration encourages its financed systems to enter into agreements with educational institutions to provide training and employment opportunities for eligible and deserving students.

VIII. THE REMUNERATION

The minimum wage established by the Fair Labor Standards Amendments of 1966 now applies to student employment by both on-campus and off-campus employers. This means that cooperative education trainees must be paid the current minimum wage rate.

IX. TERMINATING WORK ASSIGNMENT

Early termination of a student's work assignment is undesirable, but the employer must do so when it is necessary. Every effort should be made, however, to see if the situation can be handled short of terminating the work experience of the student.

When disciplinary problems of an extreme nature occur, the manager should consult with the director of the cooperative education program. If necessary, a joint conference may be held with the director and with the student in an effort to resolve the matter. In no case, however, should the actions of a student be allowed to cause serious problems and disruptions at his or her work assignment station.

X. EVALUATION REPORT OF THE STUDENT

The employer, through the student's supervisor, should evaluate each work assignment of the student. This evaluation should be discussed with the student by the supervisor and/or the manager. Forms for such evaluation are normally provided by the director of the cooperative education program.

If the student should receive any special commendation for outstanding performance while on the cooperative education work-study assignment, such recognition should be appropriately noted in the student's evaluation report. It is hoped that such recognition will stimulate the student to continue striving for excellence and for perfection in his or her continued work experience assignments.

APPENDIX A

"SUGGESTED POSTER"

W O R K E X P E R I E N C E O P P O R T U N I T Y
F O R C O L L E G E - B O U N D S T U D E N T S

SPONSORED BY _____
Name of Organization

WHAT IS THE WORK EXPERIENCE OPPORTUNITY?

The work experience opportunity is a work program with our organization that allows college-bound students from local educational institutions to develop some skills and training in a utility system. Students with major interests in Economics, Journalism, Engineering, Sociology, Home Economics, Business Administration, Accounting and Agricultural Education may find a place with us.

HOW CAN THE STUDENTS BENEFIT?

- Allows them to earn while learning.
- Prepares them for employment in a utility system.
- Provides a work experience directly or indirectly related to studies in school.

WHEN CAN THIS WORK EXPERIENCE OPPORTUNITY BEGIN?

When the student is in the last semester at a high school in our service area.

WHERE CAN A STUDENT GET MORE INFORMATION?

From _____
Name and Address of Local System

APPENDIX B

C O N S U M E R A N D P U B L I C R E L A T I O N S

Most REA borrowers have programs designed to improve and maintain good consumer and public relations. A student can make meaningful contributions to such programs by assisting with:

1. Preparation of newsletters by finding and writing stories, designing the layout, editing copy, taking photographs, and answering letters to the editor.
2. Compiling a library of slides or photographs on topics such as energy conservation, environmental protection, and services offered.
3. Meetings with consumer groups to discuss current issues, such as energy conservation, rate levels, and the environment.
4. Youth programs sponsored by the local schools, 4-H, and others on matters affecting the cooperative and the community.
5. Efforts to show consumers ways of conserving electric energy.
6. Efforts to determine future power needs by conducting surveys to determine appliance and equipment saturation and future buying intentions.
7. Planning and conducting a successful annual meeting.
8. Surveys, by telephone systems, to determine interest in upgrading or in increased uses for telephonic equipment.

C O M M U N I T Y D E V E L O P M E N T

Progressive rural electric and telephone systems take an active interest in the social and economic well-being of their consumers and in the area they serve. Many REA borrowers are working with other organizations in improving housing, providing central water systems, helping establish businesses, and the like. A student could:

1. Work with other organizations in developing a "community profile" of the entire service area. This would include such items as transportation, water and sewer services, labor supply, housing, schools, churches, local tax structures, etc.
2. Survey the needs and aspirations of the consumers as to housing, health, job training, etc.

3. Help develop and disseminate a list of local, state, and Federal agencies that offer financial and technical assistance which might be utilized in the service area.

4. Maintain contact with organizations that have community betterment projects underway for the purpose of offering the assistance of the REA borrower when appropriate.

5. Serve as a member of a project team to solicit consumers to sign up for programs such as the formation of a water district.

APPENDIX C

The Cooperative Education Program
Can Be Tailored To Fit Your
Needs

The cooperative education work experience programs recognize the impact on learning when such experiences take place on real job situations. These experiences must include new and expanded responsibilities beyond those previously attained. Thus, such programs of work experiences must be carefully planned and designed around the students' college training program.

Cooperative education programs can be tailored to suit the borrower's needs. Some REA-financed systems want the students on a full-time permanent basis. There may be some community colleges which can provide the REA-financed system with students who live in the local communities. They can work during the day on a full-time basis and attend school during the evening.

REA encourages the financed systems to carefully survey local high schools to determine potential candidates for future employment. These students should be selected while they are in their junior and senior years. If necessary, the systems should be prepared to track such students through college, using the cooperative education program, and back to their systems for full-time employment.

APPENDIX D

THE ELECTRIFICATION INDUSTRY

The future of the electric power industry will depend largely on the employment opportunities that are made available to those people who are seeking a professional career in the industry. The need for qualified men and women has never been greater. It is anticipated that power requirements of the Nation will increase twofold by the end of the 1980s. These jobs will require varying degrees of skill, education, personal qualities and experience. The industry will need personnel qualified in engineering and related occupations.

Below is listed a number of job descriptions for job entry levels to select career opportunities.

Right-Of-Way-Crewman - Clears ground for electric lines by removing trees, heavy brush and other obstructions; does general maintenance work including tree trimming, to keep electric lines free of interference.

Truckdriver/Heavy Equipment Operator - Drives the utility's bucket trucks; operates specialized equipment used in electric lines construction and maintenance.

Lineman Trainee (Apprentice Lineman) - Learning line construction; digging holes for and hauling utility poles; prepares "hardware" for journeyman lineman.

Lineman Third Class - Works under supervision of journeyman lineman or line foreman for pole climbing, basics of line work, and acts as general helper.

Lineman Second Class - Works with less supervision on energized poles as journeyman's helper.

Lineman First Class (Journeyman Lineman) - Involves diversified work erecting and repairing distribution and transmission lines, and other electric transmission and distribution structures and equipment.

Service Lineman - Experienced journeyman who is a troubleshooter locating service breakdowns and other problems and restores service, sets, connects, and disconnects meters, and collects delinquent bills.

Line Foreman - Supervises construction, maintenance, and/or services electric transmission and distribution lines, and installation of transformer banks.

Junior Engineering Aide - Trained in basics of line work, except pole-climbing or actual construction work; acts as co-op's liaison with community for new or special service, acquisition of rights-of-way, street lights, makes rough sketches for placement of lines, poles, transformers, and any other equipment, works closely with consumers, keeping them advised of progress and any problems.

Staking Engineer - Secures rights-of-ways or property easements after junior aide has done preliminary work, actually surveys and stakes electric lines in accordance with construction specifications; makes final job sketches, specifies equipment, and may also negotiate joint use agreements with other utilities for access to their poles or rights-of-way.

Meter Reader - Reads customers' electric meters, records electricity consumption; observes and reports changes in customer locations, meter tampering, and other irregularities, may also serve as collector of delinquent bills.

Home Economist - Prepares kitchen and lighting plans for members; speaks to community groups; gives appliance demonstrations and administers appliance loan programs to local schools; writes column for community newsletter, and works with the community's youth on special projects.

Power Use Advisor- Advises and assists members - home-owners, merchants, builders, factory owners and farmers - in the design or installation of wiring, lighting, electric heating and cooling systems, insulation, electrical safety, and in the most efficient and practical utilization of electric energy; usually has primary responsibility for creating and implementing energy conservation to programs.

Information Officer - Develops and maintains regular and continuing contact with local media, community groups and leaders; develops and distributes news and feature stories about co-op's operations; responds to requests for information; serves as public affairs liaison with area legislators and local government; writes and/or edits news releases, newsletters and annual reports.

Cashier Receptionist - Takes customer bill payments; receives visitors and complaints and directs them to appropriate department; answers inquiries; opens mail; takes new applications; prepares cash and check receipts for deposit.

Secretary - Requires typing, transcribing, and stenographic skills; receives visitors, answers and places telephone calls, handles personal and confidential mail and answers routine correspondence and schedules appointments for supervisor, and performs some routine clerical duties, such as maintaining files.

Draftsman - Translates electric system into precise drawings to facilitate repairs and troubleshooting.

Accountant-Bookkeeper - Supervises bookkeeping department; keeps system's books and financial records; sees that all bills are paid on time and that there is enough money in system's bank account to pay on them; invests any excess funds to earn interest; coordinates information from all departments to prepare monthly financial report and assists general manager in preparation of annual report, financial forecast, and budget.

Key punch Operator - Key punches, or codes, information onto computer tapes for recordkeeping, payroll preparation, billing, and other related administrative tasks.

Computer Operator - Operates a computer according to a pre-determined program; reviews errors and may assist in correcting the program, and maintains operating records.

Computer Programmer - Converts business and sometimes engineering problems into a language or series of instruction for computer solution; tests and corrects programs, alters them to increase operating efficiency to adapt to new requirements; maintains complete records of program development and revisions.

Interested persons should contact the Statewide Rural Electric Associations listed below about opportunities in nearby rural electric cooperatives.

Alabama Rural Electric Association
Post Office Box 7120
Montgomery, Alabama 36107

Alaska Rural Electric Co-op Association, Inc.
801 West Fireweed, S-101
Anchorage, Alaska 99503

Grand Canyon State Electric Co-op, Inc.
3003 N. Central Avenue
Phoenix, Arizona 85012

Arkansas Electric Co-ops, Inc.
Post Office Box 9469
Little Rock, Arkansas 72219

California RECA
Post Office Box 156
Ft. Bidwell, California 96112

Colorado REA
1313 West 46th Avenue
Denver, Colorado 80211

Florida Electric Co-op Association
Post Office Box 590
Tallahassee, Florida 32302

Georgia Electric Membership Corporation
148 International Blvd. S-845
Atlanta, Georgia 30303

Idaho Cooperative Utilities Association, Inc.
Post Office Drawer B
Grangeville, Idaho 83530

Association of Illinois Electric Co-ops
Post Office Box 3787
Springfield, Illinois 62708

Indiana Statewide REC, Inc.
Post Office Box 24517
Indianapolis, Indiana 46224

Kansas Electric Co-ops, Inc.
Post Office Box 4267
Topeka, Kansas 66604

Kentucky Association of Electric Co-ops
Post Office Box 32170
Louisville, Kentucky 40232

The Association of Louisiana Electric Co-ops
10725 Arline Highway
Baton Rouge, Louisiana 70816

Michigan Electric Co-op Association
6920 South Cedar, S-6
Lansing, Michigan 48910

Minnesota Rural Electric Association
4901 West 77th Street
Minneapolis, Minnesota 55435

Electric Power Associations of Mississippi
Post Office Box 8656
Jackson, Mississippi 39204

Association of Missouri Electric Co-ops
2722 East
Jefferson City, Missouri 65101

Montana Associated Utilities, Inc.
Post Office Box 1306
Great Falls, Montana 59401

Nebraska Rural Electric Association
Post Office Box 82048
Lincoln, Nebraska 68501

New York State Association of Electric Co-ops
39 Elm Street
Delhi, New York 13753

North Carolina Association of Electric Co-ops
Post Office Box 27306
Raleigh, North Carolina 27611

North Dakota Association of Rural Electric Co-ops
Post Office Box 535
Mandan, North Dakota 58554

Ohio REC, Inc.
Post Office Box 29149
Columbus, Ohio 43229

Oklahoma Association of Electric Co-ops
Post Office Box 11047
Oklahoma City, Oklahoma 73111

Oregon RECA
1460 State Street
Salem, Oregon 97301

Pennsylvania Rural Electric Association
Post Office Box 1266
Harrisburg, Pennsylvania 17108

South Carolina Electric Co-ops, Inc.
Post Office Box 145
Cayce, South Carolina 59033

South Dakota REA
Post Office Box 1138
Pierre, South Dakota 57501

Tennessee Electric Cooperative Association
Post Office Box 100912
Nashville, Tennessee 37210

Texas Electric Cooperatives, Inc.
Post office Box 9589
Austin, Texas 78766

Utah Rural Electric Association
Post Office Box BB
Sandy, Utah 84070

Virginia Association of Electric Co-ops
5601 Chamberlayne Road
Richmond, Virginia 23227

Wisconsin Electric Co-op Association
Post Office Box 686
Madison, Wisconsin 53701

Wyoming State Rural Electric Association
340 West B Street, Suite-101
Casper, Wyoming 82601

APPENDIX E

A CAREER IN TELECOMMUNICATIONS

Employment with a telephone company or cooperative is more than just a job. It is personal involvement as a member of a team dedicated to public service. Through provision of communications facilities which have become vital to our way of life, an occupation becomes a contribution to the welfare of mankind. Telephone companies in the United States combine to make up the finest system of communications in the world, and you can become a part of this continued success if you are interested in and qualify for any of the positions described in the following information.

The telephone industry is growing in both size and technology, more so than most segments of business and industry. Almost everyone in the country has at least one telephone, and many homes and businesses have multiple lines and special services available through telephone connections. Telephones can also be found on street corners, in cars, in boats, and even in briefcases carried from place to place. This dependence of the public for reliable and available communications facilities make the telephone industry a growing and extremely stable field of employment.

A career with a telephone system is truly a dedication to service and represents a personal challenge with lasting rewards.

OCCUPATIONS CLERICAL

Most telephone systems have multiple uses for clerical employees. The administrative needs of the businesses provide employment for persons who are skilled as SECRETARIES, TYPISTS, STENOGRAPHERS, BOOK-KEEPERS, OFFICE MACHINE AND COMPUTER OPERATORS, KEY-PUNCH OPERATORS, CASHIERS, RECEPTIONISTS, FILE CLERKS, ACCOUNTING CLERKS AND PAYROLL CLERKS. Other specialties and general clerical duties are also available.

OCCUPATIONS BUSINESS OFFICE & SALES

The major goal of a telephone system is that of public service, and a primary contact with the public is through the business office. Employees working

in the roles of SERVICE REPRESENTATIVES handle requests for new, revised, or discontinued service. They also serve as customer-relations representatives, and are often found in sales capacities to market available telecommunication products.

SKILL OCCUPATIONS
CRAFT & SPECIALIZED

TELEPHONE OPERATORS. They handle calls placed from point to point. Today's systems have provided the caller with direct means of calling locally as well as coast-to-coast or around-the-world. Operators however are still needed to aid customers in specialized services such as: reverse charge calls, information, and emergency assistance.

CONSTRUCTION LINEWORKERS. Lineworker's construct new telephone lines and repair damaged facilities by installing wire and cable that lead from switching points (called central offices) to customer's premises. They use power driven equipment in digging holes and pulling cable, climb poles, and work with buried cable and conduit systems.

CABLE SPLICERS. Cable Splicers complete construction or repair projects by making wire connections to complete communications circuits. Splicers can be found working on poles, aerial platforms, ladders and manholes, basements, and trenches. They connect individual wires within cables, and rearrange wires when lines have to be changed. Splicers also install terminal enclosures or boxes, for access to cables for connection purposes.

TELEPHONE INSTALLER/REPAIRPERSON. The telephone installer/repairperson's role is that of installing the telephone and keeping it in working order. They travel in trucks equipped with telephone tools and supplies, to make new installations, repair existing telephones and correct troubles. Their role is multi-purpose; to perform a service, market available products, and maintain good customer relations.

FRAMEPERSONS. Framepersons are craft workers who connect and disconnect wires that run from telephone lines and cables to switching equipment in central offices. The Frameperson works closely with the Installer/Repairperson to provide a vital link between the customer and connection to the system.

CENTRAL OFFICE EQUIPMENT TECHNICIAN. Switching systems are maintained and sometimes installed by the Central Office Equipment Technician. Technicians must coordinate closely with both Frameworkers and Installer/Repairpersons to maintain quality service.

OCCUPATIONS
PROFESSIONAL

OUTSIDE PLANT ENGINEER is responsible for cable design and physical layout, called skating. The Outside Plant Engineer is often supported by a DRAFTER, who designs maps and staking sheets. SWITCHING ENGINEER plans and/or designs switching systems. TRANSMISSION ENGINEER designs cable facilities and switching equipment.

ACCOUNTANT. Accountants keep track of profits, losses and taxes. People, training, and wage/benefit programs are often managed by PERSONNEL SPECIALISTS. Other staff and operational employees support the basic service goals in many larger companies, such as CUSTOMER SERVICE SPECIALISTS, TRAFFIC STUDY TECHNICIANS, DATA PROCESSING PROGRAMMERS, COMPUTER MARKETING REPRESENTATIVE.

MANAGEMENT AND
SUPERVISION

The basic desire of many people entering a career is to have a chance to be a SUPERVISOR or MANAGER. Telephone companies offer a wide range of opportunities in this regard. There is ample room in most organizations for progression into all levels of supervision and management by both HIGH SCHOOL and COLLEGE GRADUATES.

Telephone companies have their own training programs, both formal and on-the-job, to develop qualified management candidates. Many forms of college degrees are applicable to the industry, such as ENGINEERING, ACCOUNTING, BUSINESS ADMINISTRATION, PERSONNEL MANAGEMENT, MATH AND PHYSICS, DATA PROCESSING, MARKETING and others. Some types of supervision roles found in most telephone companies are: CONSTRUCTION FOREMAN, PLANT FOREMAN, PLANT SUPERVISOR, COMMERCIAL MANAGER, ENGINEERING SUPERVISOR, OFFICE MANAGER AND GENERAL MANAGER.

The larger companies will also offer management positions such as: CHIEF OPERATOR, TRAFFIC MANAGER, CUSTOMER SERVICES MANAGER, AREA MANAGER, DATA PROCESSING MANAGER, PERSONNEL MANAGER, ACCOUNTING MANAGER, and numerous others.

Interested persons should contact the local telephone company or cooperative or the associations listed below:

ALABAMA MISSISSIPPI Independent Telephone Association

660 Adams Avenue, Suite 276
Montgomery, Alabama 36104
Tel: 205/265-1660

ALASKA Telephone Association

P. O. Box 1325
Anchorage, Alaska 99501
Tel: 907/279-3923

ARKANSAS Telephone Association

1218 West Sixth Street
Little Rock, Arkansas 72201
Tel: 501/375-0086

CALIFORNIA Independent Telephone Association

P. O. Box 368
Roseville, California 95678
Tel: 916/782-8424

CANADIAN Independent Telephone Association

241 Vickers Street, South
Thunder Bay F, Ontario, Canada
Tel: 1-807/623-2711 Ext 402

COLORADO Independent Telephone Association

P. O. Box 48
Colorado City, Colorado 81019
Tel: 303/676-3131

FLORIDA Telephone Association

P. O. Box 1776
Tallahassee, Florida 32303
Tel: 904/877-5141

GEORGIA Telephone Association

1900 Century Boulevard, Suite 8
Atlanta, Georgia 30345
Tel: 404/321-5440

ILLINOIS Telephone Association

300 East Monroe Street, Room 306
Springfield, Illinois 62701
Tel: 217/525-1044

INDIANA Telephone Association

408 Guaranty Bldg.
Indianapolis, Indiana 46204
Tel: 317/635-1272

IOWA Telephone Association

1601 22nd Street, Suite 209
West Des Moines, Iowa 50265
Tel: 515/225-2091

KANSAS Telephone Association

917 Merchants National Bank Bldg.
Topeka, Kansas 66612
Tel: 913/234-0307

KENTUCKY Telephone Association

1004 Castleton Way South
Lexington, Kentucky 40502
Tel: 606/272-1730

LOUISIANA Telephone Association

P. O. Box 2548
Sulphur, Louisiana 70663
Tel: 318/583-2212

Telephone Association of MAINE

North Anson, Maine 04958
Tel: 207/635-9911

MICHIGAN Independent Telephone Association

122 S. Grand Avenue, Suite 205

Lansing, Michigan 48993

Tel: 517/489-7578

MINNESOTA Telephone Association, Inc.

386 N. Wabasha, 770 Federal Bldg.

St. Paul, Minnesota 55102

Tel: 612/291-7311

MISSOURI Telephone Association

P. O. Box 785

Jefferson City, Missouri 65102

Tel: 314/634-2527

MONTANA Telephone Association of Independent Companies

P. O. Box 2166

Great Falls, Montana 59403

Tel: 406/454-1123

NEBRASKA Telephone Association

521 South 14th Street

Lincoln, Nebraska 68508

Tel: 402/432-2423

NEVADA Telephone Association

P. O. Box 1190

Las Vegas, Nevada 89101

Tel: 702/385-4238

Telephone Association of NEW ENGLAND

33 Main Street

Winthrop, Maine 04364

Tel: 207/377-9912

NEW HAMPSHIRE Telephone Association

1 Pine Street

Contoocook, New Hampshire 03229

Tel: 603/746-9950

NEW YORK State Telephone Association, Inc.

111 Washington Avenue, Suite 207

Albany, New York 12210

Tel: 518/462-6696

NORTH CAROLINA Independent Telephone Association

3717 National Drive, Suite 105

Raleigh, North Carolina 27612

Tel: 919/787-7140

The OHIO Telephone Association
150 East Broad Street, Suite 220
Columbus, Ohio 43215
Tel: 614/221-3231

OKLAHOMA Telephone Association
4020 North Lincoln, Suite 210
Oklahoma City, Oklahoma 73105
Tel: 405/424-5264

OREGON Independent Telephone Association
100 High Street, Suite 220
Salem, Oregon 97301
Tel: 503/581-7430

PENNSYLVANIA Independent Telephone Association
P. O. Box 1169
Harrisburg, Pennsylvania 17108
Tel: 717/238-8311

ROCKY MOUNTAIN Telephone Association
P. O. Box 694
Cheyenne, Wyoming 82001
Tel: 307/638-8827

SOUTH CAROLINA Independent Telephone Association
P. O. Box 470
Rock Hill, South Carolina 29730
Tel: 803/324-9027

SOUTH DAKOTA Telephone Association
Hartford, South Dakota 57033
Tel: 605/528-3211

TENNESSEE Telephone Association
315 Union Street, Suite 322
Nashville, Tennessee 37201
Tel: 615/256-8005

Texas Telephone Association
1112 Perry Brooks Building
Austin, Texas 78701
Tel: 512/476-7015

Telephone Association of VERMONT
P. O. Box 9
Waitsfield, Vermont 05673
Tel: 802/496-3391

VIRGINIA Independent Telephone Association

700 East Main Street, Suite 1420

Richmond, Virginia 23219

Tel: 804/643-0688

WASHINGTON Independent Telephone Association

1501 Capitol Way, Room 201

Olympia, Washington 98501

Tel: 206/352-5453

WEST VIRGINIA Telephone Association

P. O. Box 30

St. Marys, West Virginia 26170

Tel: 304/684-2434

WISCONSIN State Telephone Association

167 N. Segoe Rd., Suite 202

Madison, Wisconsin 53705

Tel: 608/231-2477

